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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/509,738

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BLATT

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2186PB-1

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HM12/0615

EXAMINER

WHITEMAN, B/

ART UNIT

PAPER NUMBER

1633

DATE MAILED:

06/15/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/509,738

Applicant(s)

BLATT ET AL.

Examiner

Brian Whiteman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-56 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Claims 1-56 are pending and under consideration in the instant application.

#### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-20 and 26, drawn to a protein capable of affecting an ABA response and comprising one or more of the following: (i) a hydrophobic C-terminus; (ii) at least one coiled coil region; (iii) an EF-hand consensus sequence; (iv) a nucleotide binding site; and (v) a hydrophilic N-terminus; or a variant thereof; a method of screening for protein-protein interaction comprising the use of a protein of claim 1 and selecting compounds exhibiting said interaction.

Group II, claims 21-25, 27, 28, 29, 34, 35, and 36, drawn to a nucleic acid encoding the protein of claims 1; an expression vector comprising the nucleic acid of claim 21 operably linked to a promoter; an isolated or in vitro host cell transformed with the expression vector of claim 27; an isolated or in vitro cell comprising anti-sense sequence of nucleic acid of claim 21.

Group III, claims 29, 30, 36, 37 and 38, drawn to a plant comprising the expression vector of claim 28; a plant comprising the anti-sense sequence to the nucleic acid of claim 21; an in vivo plant cell according to claim 28.

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Group IV, claims 29, 30, 36, 37 and 38, drawn to a fungus comprising the expression vector of claim 28; a fungus comprising the anti-sense sequence to the nucleic acid of claim 21; an in vivo fungal cell according to claim 28.

Group V, claims 29, 30, 36, 37, and 38, drawn to a mammal comprising the expression vector of claim 28; a mammal comprising the anti-sense sequence to the nucleic acid of claim 21; an in vivo mammal cell according to claim 28.

Group VI, claims 31, 32, 33, drawn to a method of selecting compounds capable of affecting a plant's response to stress comprising screening compounds which bind to the protein of claim 1 and selecting compounds exhibiting said binding.

Group VII, claims 39-51, drawn to an assay method for screening interaction of a non-animal signaling component with a ligand.

Group VIII, claims 52 and 53, drawn to a method comprising introducing a compound identified by the assay method of claim 51; a cell having contained therein a compound identified by the assay method of claim 51.

Group IX, claims 54, 55, and 56, drawn to a method of gene transfer comprising introducing a non-plant nucleotides sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50 into an animal cell; isolated or in vitro animal cell.

Group X, claims 54 and 55, drawn to a plant, part thereof or in vivo plant cell having contained therein a non-plant nucleotide sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50.

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Group XI, claim 56, drawn to an animal, part thereof or in vivo animal cell having contained therein a non-plant nucleotide sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50.

The inventions listed as Groups I-XI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT rule 13.2, they lack the same or corresponding special features for the following reasons:

37 CFR 1.475(c) states:

“If an application contains claims to more or less than one of the combination of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.”

37 CFR 1.475(d) also states:

“If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and 1.476(c).”

37 CFR 1.475(e) further states:

“The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternative within a single claim.”

In view of 37 CFR 1.475 (c), 37 CFR 1.475 (d), and 37 CFR 1.475 (e). Group I is considered the main invention to the product first mentioned in the claims (claim 1), and the first

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recited invention drawn to other categories related thereto, e.g. a method of making, method of use (claim 19).

Groups I, II, III, IV, V, VIII, IX, X, and XI are drawn to multiple distinct products that do not share the same inventive concept. The claimed invention of Groups I, II, III, IV, V, VIII, IX, X, and XI recite distinct materials that are neither require nor recited in the claimed invention of Group I, and thus have their own special technical features. For example, the nucleic acid as claimed in Group II; a genetically modified plant encoding nucleic acid of claim 21 as claimed in Group III; a genetically modified fungus encoding nucleic acid of claim 21 as claimed in Group IV; a genetically modified mammal encoding nucleic acid of claim 21 as claimed in Group V; a cell containing a compound from the assay method of claim 51 as claimed in Group VIII; an isolated or in vitro animal cell containing a compound from the assay method of claim 50 in Group IX; a transgenic plant having contained therein a non-plant nucleotide sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50 as claimed in Group X and a transgenic animal having contained therein a non-plant nucleotide sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50 as claimed in Group XI encompass structural materials that are distinct than the amino acid sequences of Group I. Thus, it follows from the preceding analysis that the claimed inventions listed as Group I and Groups II-XI do not related to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2 they lack the same or corresponding special technical feature for the reasons set forth above.

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In addition, the claimed inventions of Group I-XI recite distinct materials and/or methods steps that are neither required nor recited in the claimed invention of Group I, and thus lack the same or corresponding technical feature for the following reasons:

The special technical feature of Group I is considered to be a protein capable of affecting an ABA response.

The special technical feature of Group II is considered to be a nucleic acid sequence encoding for a protein capable of affecting an ABA response.

The special technical feature of Group III is considered to be a genetically modified plant encoding nucleic acid of claim 21.

The special technical feature of Group IV is considered to be a genetically modified fungus encoding nucleic acid of claim 21.

The special technical feature of Group V is considered to be a genetically modified mammal encoding nucleic acid of claim 21.

The special technical feature of Group VI is considered to be a method of selecting compounds capable of affecting a plant's response to stress.

The special technical feature of Group VII is considered to be an assay method for screening interaction of a non-animal signaling component with a ligand.

The special technical feature of Group VIII is considered to be a cell having contained therein a compound identified by the assay method of claim 51.

The special technical feature of Group IX is considered to be a method of gene transfer.

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The special technical feature of Group X is considered to be a transgenic plant having contained therein a non-plant nucleotide sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50.

The special technical feature of Group XI is considered to be a transgenic animal having contained therein a non-plant nucleotide sequence having at least partial homology with a plant nucleotide sequence identified by the assay method according to claim 50.

Accordingly Groups I-XI are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

The inventions listed as Groups I-XI do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the reasons set forth above.

As the technical feature linking the members of the listed in claim does not constitute a special feature as defined by PCT Rule 13.2, particularly since the compound(s) and/or substance(s) listed in the claims do not share a structural feature in common with respect to their site of action. Thus, the requirement of unity of the invention is not fulfilled.

Claims 29 and 36 link(s) inventions II, III, IV, and V. Claims 30, 37, 38 link(s) inventions III, IV, and V. Claims 54 and 55 link(s) inventions IX and X. Claim 56 link(s) inventions IX and XI. The restriction requirement between the linked inventions is subject to the non-allowance of the linking claim(s), claims 29, 30, 36, 37, 38, 54, 55, or 56. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s)

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are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or non-statutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their divergent subject matter, restriction for examination purposes as indicated is proper.

Thus it would be unduly burdensome for the examiner to search all of the claimed inventions being sought in the pending claims.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Tracey Johnson whose telephone number is (703) 305-2982.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Whiteman whose telephone number is (703) 305-0775.

The examiner can normally be reached on M-F, (730-400 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Clark can be reached at (703) 305-4051.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 308-8724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



**DAVE T. NGUYEN**  
**PRIMARY EXAMINER**

Brian Whiteman  
Patent Examiner, Group 1633  
June 11, 2001